AMENDMENTS TO THE CLAIMS

In the Claims:

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A circuit for driving a light emitting device having a first pole and a second pole opposite to the first pole, the circuit comprising:

a diode ~~which includes~~ including a first pole to which a predetermined data signal is applied, and a second pole ~~which is~~ opposite to the first pole and [[is]] connected to the first pole of the light emitting device; and

a capacitor ~~which includes~~ including a first terminal connected to a contact point between the first pole of the light emitting device and the second pole of the diode, and a second terminal to which a predetermined control signal is applied, ~~in which, if~~

wherein, when the diode is turned on and the light emitting device is turned off, an electric charge corresponding ~~which corresponds~~ to a difference between a voltage level of the control signal and a voltage level of the data signal[[,]] is charged into the capacitor, and, when [[if]] the diode is turned off and the light emitting device is turned on after the electric charge has been charged into the capacitor, the ~~charged~~ electric charge is discharged through the light emitting device,

wherein the first pole of the diode and the first pole of the light emitting device are anodes, and the second pole of the diode and the second pole of the light emitting device are cathodes, and

wherein one cycle of the control signal includes a first interval and a second interval, the first interval having a predetermined low-level voltage and the second interval having a high-level voltage obtained by jumping the voltage in the first interval by a predetermined voltage.

2. (Cancelled).

3. (Currently amended) The circuit of claim [[2]] 1, wherein ~~one cycle of the control signal is composed of a first interval and a second interval, and the first interval has a predetermined low-level voltage, and the second interval has a high-level voltage in which, after the voltage in the first interval jumps to a predetermined voltage,~~ the voltage in the second interval is increased by a predetermined rate.

4. (Currently amended) The circuit of claim [[3]] 1, wherein the light emitting device emits light in the second interval, and the amount of current flowing through the light emitting device is determined by a potential difference between the high-level voltage of the data signal applied to the first pole of the diode in the first interval and the low-level voltage of the control signal, capacitance of the capacitor, and the length of the second interval.

5. (Currently amended) ~~The circuit of claim 1~~ A circuit for driving a light emitting device having a first pole and a second pole opposite to the first pole, the circuit comprising:

a diode including a first pole to which a predetermined data signal is applied, and a second pole opposite to the first pole and connected to the first pole of the light emitting device; and

a capacitor including a first terminal connected to a contact point between the first pole of the light emitting device and the second pole of the diode, and a second terminal to which a predetermined control signal is applied,

wherein, when the diode is turned on and the light emitting device is turned off, an electric charge corresponding to a difference between a voltage level of the control signal and a voltage level of the data signal is charged into the capacitor, and, when the diode is turned off and the light emitting device is turned on after the electric charge has been charged into the capacitor, the electric charge is discharged through the light emitting device,

wherein the first pole of the diode and the first pole of the light emitting device are cathodes, and the second pole of the diode and the second pole of the light emitting device are anodes, and

one cycle of the control signal includes a first interval and a second interval, the first interval having a predetermined high-level voltage and the second interval having a low-level voltage obtained by jumping the voltage in the first interval by a predetermined voltage.

6. (Currently amended) The circuit of claim 5, wherein ~~one cycle of the control signal is composed of a first interval and a second interval, and the first interval has a predetermined high level voltage, and the second interval has a low level voltage in which, after the voltage in the first interval jumps to a predetermined voltage,~~ the voltage in the second interval is decreased by a predetermined rate.

7. (Currently amended) The circuit of claim [[6]] 5, wherein the light emitting device emits light in the second interval, and the amount of current flowing through the light emitting device is determined by a potential difference between the low-level voltage of the data signal applied to the first pole of the diode in the first interval and the high-level voltage of the control signal, capacitance of the capacitor, and the length of the second interval.

8. (Currently amended) The circuit of claim [[6]] 1, further comprising a switching device connected between a voltage source having a turn-on voltage required to turn on the diode in the first interval of the control signal and the first pole of the diode, which is switched in response to a predetermined switching signal such that the first pole of the diode is in one state selected from a state where the turn-on voltage is applied and a floating state.

9. (Original) The circuit of claim 8, wherein brightness of the light emitting device is controlled by the number of times when the light emitting device is turned on during one frame cycle, and the number of turns-on is set by the switching signal.

10. (Original) The circuit of claim 1, further comprising an amplifier which is connected to the first pole of the diode and amplifies a voltage level of the data signal to correspond to desired brightness of the light emitting device.

11. (Currently amended) A matrix-type display panel, in which scanning lines and signal lines are arranged in a matrix-shape on a substrate, ~~and which includes~~ including at least one cell in the vicinity of a cross point between the scanning line and the signal line, ~~wherein~~ each cell comprising:

a light emitting device having a first pole and a second pole opposite to the first pole;

a diode ~~which includes~~ including a first pole to which a predetermined data signal is applied through the signal line and a second pole ~~which is~~ opposite to the first pole and [[is]] connected to the first pole of the light emitting device; and

a capacitor ~~which includes~~ including a first terminal connected to a contact point between the first pole of the light emitting device and the second pole of the diode, and a second terminal to which a predetermined control signal is applied through the scanning line, ~~in which, if~~

wherein, when the diode is turned on and the light emitting device is turned off, an electric charge ~~which corresponds~~ corresponding to a difference between a voltage level of the control signal and a voltage level of the data signal[[,]] is charged into the capacitor, and, when [[if]] the diode is turned off and the light emitting device is turned on after the electric charge has been charged into the capacitor, the ~~charged~~ electric charge is discharged through the light emitting device,

wherein the first pole of the diode and the first pole of the light emitting device are anodes, and the second pole of the diode and the second pole of the light emitting device are cathodes, and

wherein a control signal having predetermined phase delay is applied to a row of cells, and one cycle of the control signal includes a first interval and a second interval, the first interval having a predetermined low-level voltage and the second interval having a high-level voltage obtained by jumping the voltage in the first interval by a predetermined voltage.

12. (Cancelled).

13. (Currently amended) The panel of claim [[12]] 11, wherein ~~a control signal having predetermined phase delay is applied to a row of each cell, and one cycle of the control signal is composed of a first interval and a second interval, and the first interval has a predetermined low-level voltage, and the second interval has a high-level voltage in which, after the voltage in the first interval jumps to a predetermined voltage, a~~ the voltage in the second interval is increased by a predetermined rate.

14. (Currently amended) The panel of claim [[13]] 11, wherein the light emitting device emits light in the second interval, and the amount of current flowing through the light

emitting device is determined by a potential difference between the high-level voltage of the data signal applied to the first pole of the diode in the first interval and the low-level voltage of the control signal, capacitance of the capacitor, and the length of the second interval.

15. (Currently amended) ~~The panel of claim 11~~ A matrix-type display panel, in which scanning lines and signal lines are arranged in a matrix-shape on a substrate, including at least one cell in the vicinity of a cross point between the scanning line and the signal line, each cell comprising:

a light emitting device having a first pole and a second pole opposite to the first pole;

a diode including a first pole to which a predetermined data signal is applied through the signal line, and a second pole opposite to the first pole and connected to the first pole of the light emitting device; and

a capacitor including a first terminal connected to a contact point between the first pole of the light emitting device and the second pole of the diode, and a second terminal to which a predetermined control signal is applied through the scanning line,

wherein, when the diode is turned on and the light emitting device is turned off, an electric charge corresponding to a difference between a voltage level of the control signal and a voltage level of the data signal is charged into the capacitor, and, when the diode is turned off and the light emitting device is turned on after the electric charge has been charged into the capacitor, the electric charge is discharged through the light emitting device,

wherein the first pole of the diode and the first pole of the light emitting device are cathodes, and the second pole of the diode and the second pole of the light emitting device are anodes, and

wherein a control signal having predetermined phase delay is applied to a row of cells, and one cycle of the control signal includes a first interval and a second interval, the first interval having a predetermined high-level voltage and the second interval having a low-level voltage obtained by jumping the voltage in the first interval by a predetermined voltage.

16. (Currently amended) The panel of claim 15, wherein ~~a control signal having predetermined phase delay is applied to a row of each cell, and one cycle of the control signal is composed of a first interval and a second interval, and the first interval has a predetermined~~

~~high-level voltage, and the second interval has a low-level voltage in which, after the voltage in the first interval jumps to a predetermined voltage, a~~ the voltage in the second interval is decreased by a predetermined rate.

17. (Currently amended) The panel of claim [[16]] 15, wherein the light emitting device emits light at the second interval, and the amount of current flowing through the light emitting device is determined by a potential difference between the high-level voltage of the data signal applied to the first pole of the diode in the first interval and the low-level voltage of the control signal, capacitance of the capacitor, and the length of the second interval.

18. (Currently amended) The panel of claim [[13]] 11, wherein the cycle of the control signal applied to a row of ~~each~~ cells has a maximum value ~~at maximum which corresponds~~ corresponding to a frame cycle of the display panel.

19. (Original) The panel of claim 18, wherein the width of the first interval of the control signal is set to be a value obtained by dividing the cycle of the control signal by the number of rows of the display panel.

20. (New) The circuit of claim 5, further comprising:

a switching device connected between a voltage source, having a turn-on voltage required to turn on the diode in the first interval of the control signal, and the first pole of the diode, the switching device being switched in response to a predetermined switching signal such that the first pole of the diode is in a state selected from a ground state, in which the turn-on voltage is applied, and a floating state,

wherein a brightness of the light emitting device is controlled by the number of times the light emitting device is turned on during one frame cycle, and

wherein the number of turn-on times is set by the switching signal.

21. (New) The panel of claim 15, wherein the cycle of the control signal applied to a row of cells has a maximum value corresponding to a frame cycle of the display panel.

22. (New) The panel of claim 21, wherein the width of the first interval of the control signal is set to be a value obtained by dividing the cycle of the control signal by the number of rows of the display panel.